

**CHALLENGING THE MODERN PARADIGM: TURNING TO ALDO
LEOPOLD AND FLYFISHING LITERATURE FOR A NEW
APPROACH TO LANDSCAPE AESTHETICS.**

by

Jennifer L. Hoerup

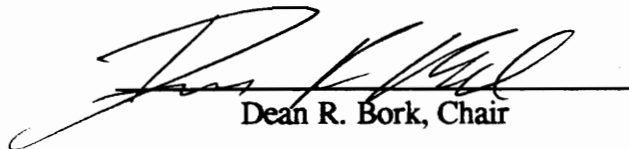
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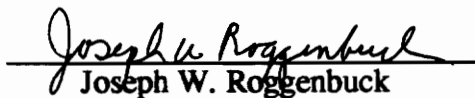
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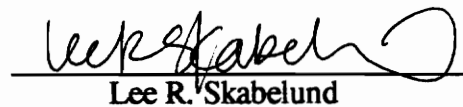
IN

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Committee Chair: Dean R. Bork
Landscape Architecture

(ABSTRACT)

This paper proposes that the cultural understanding of nature under the Modern paradigm is inadequate. I propose that the result of this deficient representation of nature has been the degradation of the environment and our culture. The degradation of the environment is well studied, but I suggest that our culture is degraded by limited contact with nature and the loss of nature as a potential source of value and source of meaning. This paper explores the writings of several philosophers and social critics who support this supposition. In order to develop a more representative understanding of nature this paper suggests that landscape architects study Aldo Leopold's theory of landscape aesthetics. Leopold's concept of experiential knowledge is discussed as a means of offering our culture a deeper appreciation of nature, but also as a means for landscape architects to improve their own education and design process. Based on the experiences of flyfishers this paper suggests that the practice of Leopold's landscape aesthetic is both possible and fulfilling.

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This Essay is Dedicated to the Memory of

Dr. William E. Shepherd

He inspired my commitment to fieldwork.

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1. Introduction

Culture can be understood as a story which explains the world and the human relationship to the world. This explanation or story is a shared understanding of the world which facilitates communication within a social group. In the United States modernism is currently the dominant culture of our society, and the influence of modernism can be seen in our practice of science, our literature and all other art forms, in our religious beliefs and our ethical theories. Modernism, however, has been increasingly challenged by various segments of our society. A culture is challenged and adapted when our shared understanding of the world shifts and the culture, in this case modernism, no longer sufficiently explains our experience or provides a meaning for our lives.

In the various challenges to modernism, of particular interest to landscape architects is recent criticism that modernism does not sufficiently represent nature or our relationship to it. Throughout this text I will refer to two types of nature. There is the nature which is defined, described and understood by our culture -- I shall identify this as (N)ature. Recently there has been some discussion of the idea that nature is totally a cultural concept.¹ In the effort to understand our current relationship to nature I believe this idea is valuable, however, I feel it is also important to acknowledge that there is also another nature which is the life and organization of all living creatures (including humans) and non-living processes, and which exists outside of our culture. It existed before human culture, through-out our various cultures, and would continue to exist (minus one species) without our culture. In my text I will refer to this as (n)ature. I suggest that it is this nature that has not been sufficiently represented by our Nature, and as a result, our relationship with nature is complex, contradictory and ultimately inadequate.

The criticism that our culture has misrepresented nature has its roots in the increasing concern over environmental degradation, extinction of species, mistreatment of animals and other environmental issues. It is however, also based in the belief that the very quality of our lives has been diminished by discarding/ignoring/conquering a potential source of value and meaning which may be the very source for which our culture has searched. If it is true, as many propose, that this misrepresentation has limited the richness of our lives, then

¹ See for example The Social Creation of Nature by Neil Evernden.

this suggests that the landscape architect's contribution to society has also been necessarily limited.

Landscape architects are landscape designers and environmental planners -- simplistically, Nature is our medium -- but we are also members of our culture and therefore we share the same cultural understanding of Nature. Perhaps more than any other group we understand the contradictions and limitations of our relationship to Nature, however we are still confined to this cultural concept if we desire that our work communicate to our culture. As a result, if the culture inadequately represents nature then our work is limited in its potential meaning and the human experience of our designed landscapes is likewise limited.

If we accept that it is now appropriate, and perhaps the responsibility of our profession, to explore alternative representations of nature and our relationship to it, there are critical, philosophical, and experiential writings that can guide our exploration. This paper focuses on alternative theories which discuss our knowledge and aesthetic appreciation of Nature. Specifically I will discuss Aldo Leopold's landscape aesthetic theory and the idea that new forms of knowledge could enhance our aesthetic appreciation of nature.

I propose that Leopold's landscape aesthetic could provide our culture a process of enriching our experience of nature, thereby providing that first step to a better understanding of nature and us. This process requires an experiential knowledge of the land. Experiential knowledge is a meaningful term in our culture, however Leopold broadened the term to include the use of our senses. Sensory input has been consciously removed from the modern search for knowledge² and certainly experiential knowledge is not typically a component of aesthetic appreciation. This, however has not deterred philosophers from proposing these ideas, nor has it deterred flyfishers from experiencing this type of landscape aesthetic. This paper concludes by analyzing and sharing the rich and potent literature of flyfishers as an example of Leopold's landscape aesthetic which is experienced everyday by members of our culture.

² Evernden, Neil, The Social Creation of Nature, (The Johns Hopkins University Press, 1992), p. 51.

II. Challenging (N)ature

Thomas Kuhn, scientist and a historian of science, defined the word paradigm, and its relationship to scientific community, in his book The Structure of Scientific Revolutions. According to Kuhn a paradigm is a framework of understanding which is accepted by an entire scientific community and which consists of values, theories, methodologies and techniques.³ The paradigm is taken to be "true" by the community when it provides accepted solutions to recognized problems or previously unresolved questions. Generally, the paradigm is not challenged, but typically reinforced with further study.

According to Kuhn, however, paradigms do change or shift as anomalies challenge the existing paradigm. If these anomalies are significant and remain unanswered they can create a crisis for the paradigm. When this occurs the scientific community also experiences a state of crisis until an accepted alternate paradigm is developed.⁴ While an entire culture is not as organized or as systematic in its search for meaning as the scientific community, the process of paradigm development and shifting can and has been applied to cultural frameworks. A culture does not consciously attempt to reinforce its currently accepted paradigm, however, concordant developments in the theories of science, arts and ethics, for example, can be viewed as support for the larger paradigm. Similar to a shifting scientific paradigm, a cultural paradigm may shift as new experiences, new values, or new questions develop which can not be explained by the existing paradigm. The culture, in a state of crisis, searches for meaning and over time embraces a new paradigm.

According to philosopher Max Oelschlaeger, a "paradigmatic shift is in the wind" because humans are searching for an answer the question of who we are. Oelschlaeger proposes these answers are not supplied by the existing modern paradigm, partially because under the modern paradigm we have imagined ourselves to be distinct and separate from nature.⁵ Another philosopher, Freya Mathews agrees. She suggests that our culture has failed to recognize our interconnectedness with nature, and as a result our culture has malfunctioned.⁶ Recent scientific developments, especially in the fields of physics and

³ Kuhn, Thomas, The Structure of Scientific Revolutions 2nd edition, (The University of Chicago Press, 1970) p.175

⁴ Ibid., p.77.

⁵ Oelschlaeger, Max, The Idea of Wilderness, (Yale University Press, 1991), p.340.

⁶ Mathews, Freya, The Ecological Self, (Barnes & Noble Books, 1991), p. 156.

ecology, tell us that we are far more dependent and connected to our surrounding environment than we believe. Basing her work on these recent developments, Mathews proposes a new cosmology for our culture.

Mathews defines cosmology as a framework of outlines which describes the *actual* world.⁷ According to Mathews cosmology is a cultural understanding of the physical world which is one layer -- one part -- of a comprehensive metaphysic. A cosmology "serves to orient the community to the world" by helping the community define its place in the larger picture of the universe.⁸ This orientation is important as the foundation of all other cultural beliefs and understandings. A working cosmology answers the human questions of who we are and where we are going, without a cosmology a culture is left questioning the meaning of human life. Mathews offers this description of such a culture:

(A) culture deprived of any symbolic representation of the universe and of its own relation to it will be a culture of nonplused, unmotivated individuals, set down inescapably in a world which makes no sense to them, and which accordingly baffles their agency. What are they to do in this world to which they do not belong? No natural directives appoint themselves. Self-interest is the only rational motive. Any other values smack of arbitrariness. Vocationless, such individuals must sink eventually into apathy and alienation, or into the mindless and joyless pursuits of material ends....such a group does not offer the best prospect for stable community.⁹

A major component of Mathews' cosmology is a thorough understanding of our interconnectedness to nature. As Mathews suggests, the significance of nature has been removed from what exists of our culture's cosmology. In our cosmology Nature exists for our benefit, to be used as we deem necessary. We no longer see ourselves as a part of the natural community, and further we do not recognize any interconnection or interdependence. According to Mathews the eventual result of this interpretation of nature, will necessarily be the failure of our cultural paradigm because this interpretation is not an accurate account of the actual world. Mathews believes:

⁷ Ibid. p. 11.

⁸ Ibid. p. 12.

⁹ Ibid. p. 13-14.

The kind of culture that enables us ... to flourish as human beings is precisely the culture that understands and represents our interconnectedness with nature. The reason for this is simply that, *this is the way we are*. To represent us as anything less than this is in fact to misrepresent us to ourselves ... A central function of culture is to provide a symbolic representation of the world.if it is misleading or false in its presentation of the way things are, then neither society nor individual can flourish.¹⁰

To summarize Mathews' interpretation of our culture: we have limited ourselves by not incorporating our actual relationship with nature into our paradigmatic representation of the world. Mathews has suggested that such a culture will eventually fail, and under Kuhn's definition of paradigm we can understand how that failure and the resulting shift to a new paradigm may occur. Unfortunately, in the meantime, as members of the modern culture, we can not reach our maximum potential because we have restricted our place in the world.

Philosopher Oelschlaeger also suggests that our cultural potential is limited as long as nature remains only a backdrop and resource for human activity. Oelschlaeger proposes that by re-establishing nature as our context we will rediscover a source of values and meaning that will enrich our own lives and the quality of the natural environment.

Oelschlaeger writes:

We are precluded by our idea of nature from recognizing its own being, its history and elaboration. The modern mind has lost any sense of human dependence on an enveloping and therefore transcending *source of value*.¹¹

Wilderness, for Oelschlaeger, is a potential source of meaning and value for human society, but the modern paradigm limits our ability to tap wilderness as a source. Culture is language and therefore our culture is confined to understanding only that for which we have language. This suggests that since the modern culture has a limited understanding of nature, then we can not hope to understand nature better from within or through our culture. Language, Oelschlaeger believes, has come between humans and nature. In order to break through the barrier we must "refocus attention on language in its symbolizing function" and develop direct links to nature.¹² Ultimately there must be a common language for communication if our culture is to benefit from a "return to nature". However a true return, unencumbered by our existing concepts, would provide a richer source of

¹⁰ *Ibid.* p.156-157.

¹¹ Oelschlaeger, p.338.

¹² *Ibid.* p. 350.

values, and as a result a richer language (and culture) for its ability to symbolize a more profound world.

Arnold Berleant, philosopher and author of The Aesthetics of Environment, has explored the ramifications to aesthetic theory should our culture recognize its interconnection with nature. Berleant focuses on the human perception of environment which he suggests "occupies a central place in aesthetics"¹³. It is through perception that we encounter, comprehend and find beauty in our environment. If we accept that we are in a constant exchange with our surroundings then we can begin to acknowledge the significance of our senses and the act of perception in our understanding and appreciation of the environment. It follows then that we could have an aesthetic responses to all we encounter. Berleant described this as an expansion of our aesthetic awareness. Berleant suggests that the consequences of this expansion are as follows:

If every *thing* has an aesthetic dimension, then so does every experience of every thing, since things stand for us only in so far as we experience them, and an aesthetic dimension is inherent in all experience.¹⁴

The linking idea of aesthetics to experience is valuable because it suggests not that each experience is aesthetic, but that each experience has the potential to be aesthetic. As long as we are fully engaged with our surroundings then each moment may be an aesthetic one. In a culture that is attempting to reconnect to nature this concept could be quite powerful. As our effort to engage ourselves with our environment leads to increased aesthetic experiences, the positive feedback of an aesthetic experience could lead to an increased awareness of our environment.¹⁵ The result is a positive feedback loop which could only lead to a more profound understanding of nature and experiences enriched by that understanding.

The philosophies of these authors presents a challenge to our culture, but I feel they are a call to action for landscape architects, as well as other professionals working with the environment. I feel this for two reasons. First, I think that exploring these ideas will help us resolve some of the questions we have about our own profession. As a profession we have been open to broadening the scope of a landscape architect's tasks, but we have also

¹³ Berleant, Arnold, The Aesthetics of Environment, (Temple University Press, 1992), p.19.

¹⁴ Ibid. p. 11.

¹⁵ Ibid. p. 10.

become dismayed at how difficult it is to define ourselves as a profession. We have accepted new challenges because we recognize that working with nature can not be confined to backyards. We see the influences of nature on humans, and vice versa, at many scales and in many places, and our professions' growth has reflected this. Unfortunately, our culture's preference for well defined spheres of influence and its complex and contradictory view of nature has made our work difficult. How can we work at the seam where human and nature comes together when our culture has such a limited view of nature -- when we realize that "the seam" doesn't even exist, but instead our interactions with nature are never-ending? The ideas of these philosophers offer us another way to define our profession.

Second, I think that as professionals we strive to offer our best work, and clearly a deeper understanding of nature will at the very least enhance our work. At the most, I think that if these ideas are embraced our culture will have a common language far richer with symbolic meaning; landscape architects will have more opportunities to create aesthetic experiences with a deeper palette to work from, and landscape architects will have a better understanding of how to blend natural and human processes. This last advantage would be a resolution to one of our most frustrating problems. In a culture where nature is distinct from human and science is distinct from aesthetics it is difficult for our brains to pull these spheres together into a cohesive, meaningful whole. If we were able to break down these barriers our work would indeed benefit. The question now becomes how to turn the ideas of the philosophers into practice. I believe that we can draw inspiration, but also practical advice from the work of Aldo Leopold.

Aldo Leopold was a scientist, resource manager and author who lived from 1887 to 1948. In his life he witnessed some of our worst environmental tragedies and the birth of environmental conservation. His life coincided with perhaps the peak of modernism in our culture. He was not educated as a philosopher, but he was a thoughtful man whose ideas are still relevant today, possibly more so as the modern paradigm is increasingly challenged. He is best known as the author of A Sand County Almanac in which he discussed both land ethics and aesthetics. Through his writings Leopold proposed a philosophical framework based in the recognition of humans as members ecologically linked to the natural community. Leopold believed, like the philosophers above, that if our culture would accept membership in the natural community then environmental

degradation would stop our quality of life would improve. He felt that such an acceptance of the larger community would heal the division between human and nature, and would open new opportunities for experience. His philosophy was based largely on the new science of ecology, and his experiences in the land and the beauty he found there.

II. *Aldo Leopold's Land Aesthetic*

Philosopher John Dewey described our culture as being artificially divided into separate spheres of religion, politics, science, morality and art.¹⁶ He suggested that ideally we would recognize that these spheres actually overlap and that our values for each are not distinct. Thus there is no pure separation between what is good or right and what is beautiful. Dewey reminds us that the Greeks believed good and beauty were one and the same; the good recognizable by its beauty and the beautiful recognized as normative goodness. Dewey suggested that today the "one great defect in what passes as morality is its anesthetic quality."¹⁷ Isolated from beauty, morality has become "grudging, piecemeal concessions" to established moral duties and obligations. Dewey proposed that if beauty were identified with good conduct then we would strive towards morality with "wholehearted action."¹⁸ Aldo Leopold also believed that right action must respond to the aesthetic, and he saw, in the beauty of the land, the opportunity to encourage an environmental morality of "wholehearted action."

Leopold, like Dewey, recognized that ethical responsibilities and ethical imperatives were grim business.¹⁹ For all of Leopold's effort to define and promote a land ethic, he understood that our culture, with its political and technological assumptions about our relationship to land, would not embrace such ideas easily or willingly. He knew that we would be more likely to embrace our relationship and responsibility to our land community

¹⁶ Dewey, John, Experience and Nature, (Dover, 1958), p.38.

¹⁷ Ibid. p.39.

¹⁸ Ibid.

¹⁹ Callicott, J. Baird, "Leopold's Land Aesthetic", (Journal of Soil and Water Conservation, July-August, 1983),.p.329

if it proved rewarding -- some pleasure with the responsibility.²⁰ In his writing Leopold turned to the powerfully persuasive beauty of nature as that needed reward.

Callicott suggests that Leopold developed his own concept of a landscape aesthetic because he believed that increasing the public's aesthetic appreciation for the environment would increase the public's understanding of their relationship to the environment.²¹ Leopold never wrote an essay devoted to the topic of aesthetics but, according to Callicott's synthesis of his writings on the topic, the land aesthetic was consistently an important part of Leopold's philosophy.²² Leopold recognized a connection between the aesthetic and the ethical as is indicated by his inclusion of beauty as one parameter of right action.²³ For Leopold, beauty was a normative value that humans could recognize. In recognizing the value of beauty, he believed, we would strive to protect it. Leopold realized however, that our ability to aesthetically appreciate nature was limited, and therefore, much of Leopold's writing was devoted to describing the land's beauty so that he could share his experience of that beauty and encourage others.

Defining the Land Aesthetic: The Sensory Component

Leopold proposed that the requirements for an aesthetic experience of the land required full sensory and mental stimulation.²⁴ Together, he believed, these informed a rich aesthetic experience; anything less was but a fragment of the potential experience. For instance, we depend on our visual sense for assessing the land, however, sight alone can not perceive the total beauty of the landscape. Visually, humans can only appreciate the surface of a landscape, but Leopold believed that more beauty lay in the invisible relationships and interactions occurring in the landscape.²⁵ Invisible interactions may be perceived by other senses -- touch, taste, sound, but only if the mind is receptive.

²⁰ Ibid.

²¹ Ibid.

²² Ibid.

²³ Leopold, p. 262 "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."

²⁴ Callicott, J. Baird ed., Companion to A Sand County Almanac (University of Wisconsin Press, 1987) p.166.

²⁵ Leopold, p.291 "... we may safely say that (Daniel) Boone saw only the surface of things. The incredible intricacies of the plant and animal community - the intrinsic beauty of the organism called America were invisible ... to Daniel Boone...."

According to Dewey, "the senses are the organs through which the live creature participates directly in the on goings of the world about him."²⁶ The more senses engaged, the greater the opportunity for participation, and through participation the aesthetic qualities of the land are available to the human. Without full participation, the aesthetic experience is limited. Engaging all of our senses extends our ability to appreciate the land by providing the "raw material" of an aesthetic experience, however, that experience is not complete until it is transformed by our knowledge of the land.²⁷

Knowledge as Component

As raw material, sensory responses are limited as direct sources of experience. The material must be transformed by our existing knowledge base so that the full implications and potential of the materials may be experienced. Philosopher Marjorie Grene points out "nature does not simply call out to the knower information about her (nature's) character and contents, but answers the questions he (the knower) puts."²⁸ Without knowing what relationships could exist in the landscape Leopold felt that we could never completely experience its wealth of beauty. Grene suggests that experience must be recognized to consist of two parts: our receptivity and our intelligence.²⁹ The greater our knowledge of the landscape, the richer our experience of the landscape. The more we know to ask, the more receptive we can be to the answers. As we are able to comprehend and experience the land as whole, then we experience the beauty that is a function of the wholeness.

Knowledge, however, comes in many forms. One form Leopold called "book knowledge" which he defined as knowledge gained through academic studies. Another form is experiential knowledge which is gained after long periods of time spent with a landscape. To Leopold book knowledge was the least important of the two. While Leopold himself had learned a great deal from his studies of science and humanities, he recognized that academic studies were limited as opportunities for appreciating the environment first-hand.³⁰ Leopold, instead, emphasized the knowledge that could only come with long-term, intimate interaction with a landscape. Book knowledge helps one to understand the facts about the interactions and processes of given ecosystems; but Leopold believed that

²⁶ Dewey, p. 22

²⁷ *Ibid.* p.24.

²⁸ Grene, Marjorie, p. 135, *The Knower and the Known*, Basic Books, Inc. New York, 1966.

²⁹ *Ibid.* p. 142

³⁰ Callicott (1983), p.332.

until one discovered those relationships in the field one would never personally know the beauty of that ecosystem.

Perhaps one of the most moving examples of the relationship between book knowledge, experiential knowledge and the experience of beauty is Leopold's essay "Marshland Elegy."³¹ In part, this essay is a description of Leopold's experience in a Wisconsin marsh. Through Leopold's senses we are able to hear the subtle sounds of the pre-dawn marsh. We are able to feel the morning dew and the movement of air as fog moves over the bog-meadow. Then, as the sun rises we are treated to an explosion of sound and we see for the first time the movement of a "great echelon" of cranes landing to feed in the marsh. Leopold is clearly moved by the power of these great and graceful birds, but as he moves through his essay we learn that his experience is made richer by his understanding of the history of the cranes in this marsh, a history dependent upon the marsh's ecological processes.

Leopold appreciates the crane not only as a living creature, but also as a symbol of the functioning marsh with a long history that reaches back to the slow northward shift of the glaciers. Leopold, understanding this history, describes to the reader the process of "marsh building." Post-glacial lagoons collected floating bogs of sphagnum moss which, in turn, were stabilized by the advance of sedge, then tamarack and spruce trees. The lagoon was slowly replaced by moss meadows which cover the surface of many layers of peat. These moss meadows proved excellent habitat for marsh-dwellers -- deer, prairie chickens, tamarack, cranberries and crane.³²

As humans our imagination is limited to the reach of human generations -- we tend to experience the present and only imagine a past and future of a few decades, maybe a few hundred years. Leopold's appreciation of the marsh was not limited to a human timeline. As Holmes Rolston III understood; "earth is historically a remarkable, valuable place prior to the human arrival, culture, and industry."³³ Understanding the process of marsh-building gave Leopold a glimpse of the long history of marsh, not in a human scale of time,

³¹ Leopold, Aldo, p.101.

³² Ibid. p. 102.

³³ Rolston III, Holmes, "Are Values in "Nature Subjective or Objective?", (Environmental Ethics, Summer 1982), p.397

but in geological time scale, and with this glimpse he imagined the future of the crane, far beyond our typical human vision of the future. Leopold writes:

A sense of time lies thick and heavy on such a place. Yearly since the ice age it has awakened each spring to the clangor of cranes. The peat layers that comprise the bog are laid down in the basin of an ancient lake. The cranes stand, as it were, upon the sodden pages of their own history. These peats and the compressed remains of the mosses that clogged the pools, of the tamaracks that spread over the moss, of the cranes that bugled over the tamaracks since the retreat of the ice sheet. An endless caravan of generations has built of its own bones this bridge into the future this habitat where the oncoming host again may live and breed and die.

To what end? Out on the bog a crane, gulping some luckless frog, springs his ungainly hulk into the air and flails the morning sun with mighty wings. The tamaracks re-echo with his bugled certitude. He seems to know.³⁴

Leopold closes this section with the suggestion that the crane understands its purpose. Some would disagree, arguing that the comprehension of "purpose" is singularly a human trait. Similarly some would argue that the recognition of value is solely a human ability. This ability of humans to recognize value, however, is often confused with the source of such values. Again many would argue that humans are the source and measure of what constitutes value. This is a classic modern argument. However, I propose that Leopold is linking purpose to value, and that he would suggest, to the contrary, that value exists in nature and will continue to exist there despite the comings and goings of the human species. Leopold, by appreciating the beauty of the marsh -- a beauty resting in the integrity of its history and potential of its future -- is able to recognize the value of the marsh that exists beyond the domain of human values.

The origin of value is a difficult philosophical question; however, this does not negate the importance of Leopold's effort. Leopold was deeply concerned that we were destroying ecosystems to suit our needs, without understanding that the ecosystem may have value beyond our evaluation of them for human purposes. By showing us the aesthetic value of the marsh, Leopold hoped that we would reconsider our policy of draining marshland. In order to show us the beauty of the marsh, however, Leopold necessarily had to go beyond our traditional ideas of aesthetics. Marshes are not considered scenic places and therefore historically we have not attempted to protect and preserve them. Through Leopold's senses

³⁴ Leopold, p. 102.

and his understanding of the marsh, however, we can recognize the richness in the history of the marsh, the complexity of the relationships that support the marsh and the diversity of life that occupies the marsh. Where once we saw dismal weeds, murky soil and mosquitoes, now we see a habitat of subtle beauty brimming with life. It was Leopold's hope that once we were able to see the beauty of the marsh we would be more thoughtful concerning our impacts to the marsh.

The Potential for Enriching Human Experience

Leopold's desire to broaden our sense of aesthetic went further than the desire to protect endangered ecosystems. Our limited sense of aesthetic is more than a limitation in our evaluation of landscapes; it is a limitation of our life experience. It could be argued that history and ecology do not make a landscape aesthetic. Similarly, one might suggest that understanding the technical merits of a painting does not necessarily make that painting beautiful. Leopold, however, believed that an intimate understanding of a landscape is essential because it heightens our aesthetic experience of the landscape. Leopold's description of the marsh is a poetic listing of the qualities of that landscape, but it is important to understand that Leopold, at the moment of sunrise, was not checking off his sensory experiences or running through the history of the marsh. Instead he was experiencing the beauty of the cranes' arrival -- an arrival made more beautiful by his comprehensive understanding of the marsh. Leopold proposed that his experience -- his aesthetic experience -- was deeply enriched by his knowledge of the marsh and his freedom from depending only on his sense of sight. Leopold felt that these richer aesthetic experiences also enriched his life.

Based on his own experience, Leopold described the aesthetic experience as being a moment when all that you sensed and all that you knew came together, synergistically, to create a feeling of harmony with the landscape -- a moment when as a human you were one with the processes and interactions of the land community.³⁵ This moment removed Leopold from the exclusive human community and placed him squarely within a functioning land community to which he was a contributing member. As a community member he glimpsed truths and values in the landscape that previously had been beyond his comprehension. For instance he writes:

³⁵ Callicott (1987), p.168

The song of river ordinarily means the tune that waters play on rock, root, and rapid.... This song of the waters is audible to every ear, but there is other music in these hills, by no means audible to all. To hear even a few notes of it you must live first here for a long time, and you must know the speech of the hills and rivers. Then on a still night, when the campfire is low and the Pleiades have climbed over rimrocks, sit quietly and listen for a wolf to howl, and think hard of everything you have seen and tried to understand. Then you may hear it -- a vast pulsing harmony -- its score inscribed on a thousand hills, its notes the lives and deaths of plants and animals, its rhythms spanning the seconds and the centuries.³⁶

Leopold continues on to discuss the role of the sciences in our understanding of the world. He describes our love for facts and suggests that harmony, as an unproven fact, becomes the domain of the poet. Leopold criticizes the scientific community for its "dismemberment" of the parts that form the community of the river and for its inability to step back and see the community as a whole.³⁷ Leopold clearly felt enriched by hearing the music of the river, and he feared that unless we accept the domain of the poets as equal in importance to the domain of the scientist we may all lose the opportunity to hear the music. As he summarizes:

Science contributes moral as well as material blessings to the world. Its great moral contribution is objectivity, or the scientific point of view. This means doubting everything except facts; it means hewing to the facts, let the chips fall where they may. One of the facts hewn to by science is that every river needs more people, and all people need more inventions, and hence more science; the good life depends on the indefinite extension of this chain of logic. That the good life on any river may likewise depend on the perception of its music, and the preservation of some music to perceive, is a form of doubt not yet entertained by science.³⁸

Aldo Leopold offers us a vision of world rich with potential aesthetic experiences, a world where the human place in the land community is accepted with a feeling of great fulfillment. It is a vision that offers a "win-win" solution. Human health and welfare is greatly improved and the land community enjoys the opportunity to restore itself and prosper. Leopold offered this vision to counter what he recognized as the significant degradation of

³⁶ Leopold, p. 158

³⁷ *Ibid.* p.163.

³⁸ *Ibid.*

all life on the planet. He offered this vision to help our culture find its place within the land community, for our sake as much as nature's sake. Leopold's plea that we recognize our role in the land community can be compared to discussions of the human individual's role in the human community. The logic is the same only the individuals and communities are different.

For example, philosopher Kierkegaard is said to have recognized that the existential individual may claim independence from the human community and its collective normative values, but only at great cost:

(T)he self is its own master, absolutely its own master, so called; precisely this is the despair, but also what it regards as its pleasure and delight. On closer examination, however, it is easy to see that this absolute ruler is a king without a country, actually ruling over nothing building only castles in the air.³⁹

The individual may call him or herself master, but without a community there is no pleasure in being master. Philosopher T. K. Seung interprets Kierkegaard's statement as recognition of the "hollow victory" of subjectivism.⁴⁰

According to Webster's Dictionary subjectivism proposes that the supreme good is a subjective experience or feeling, and that individual feeling is the ultimate criterion of the good and the right. In this case, the individual Kierkegaard describes derives his or her own values based on his or her experiences, thereby disputing the objective values of society. Such a victory is hollow however, as Seung suggests, because the individual is at that point necessarily removed from society, effectively alone in the world. As a culture, we recognize that there exist objective or universal values, and we depend on these values as the organization of our ethical framework.⁴¹ Without this ethical framework, the community would not be able to function. Without the framework there is only chaos. An

³⁹ Seung, T.K., p. 208, Intuition and Construction, Yale University Press, New Haven, 1993.

⁴⁰ Ibid.

⁴¹ We can expand here on Mathews' philosophy. If cosmology is the foundation of the cultural framework and objective values are the organization of that framework then we can begin to see a relationship between the two. If the cosmology is weak then the basis for objective values is limited. In our culture we have removed nature as a significant component of how we understand our place in the world, therefore we can not draw from nature for our objective values. It also follows that we can not expand the source of our objective values without changing our cosmology.

individual who does not accept the community's objective values will not be able to participate in or benefit from the meaningful interactions of community life.

We could interpret Leopold as applying the situation of Kierkegaard's existential individual to the entire culture of the West. The modern human has denied any relationship to nature just as the existential individual denies the community. We have established our own values, without consideration of values that may exist outside our culture. We consider our values objective relative to the human species, however, our values could be considered subjective relative to the land community in the way that the existential individual's values are subjective.

Our culture could be viewed as one species self-exiled from the land community in the way that the existentialist is one individual self-exiled from the human community. Thus, as a culture, we are like the existential individual who believes that he or she is sole determining source of value, but due to that belief we find ourselves unable to participate in meaningful interactions with the land community. As modernists we cannot recognize the objective values which encompasses the entire ecological community.⁴² Holmes Rolston III concurs; he writes:

The unexamined life is not worth living, said Socrates, (and) life cannot be fully examined until examined in its ecology and evolutionary history. The life that examines itself ... finds that what we are subjectively experiencing lies within something objectively miraculous.⁴³

Leopold would also agree that our modern values are subjective relative to the larger land community, and as his writings suggest, the victory we have imagined for ourselves over nature, has indeed been a hollow victory.

Through Leopold we have had a vision of the rich and gratifying experiences which can result from a renewed relationship with nature. The following section explores the literature of the fly-fishing culture. I suggest that fly-fishers experience daily Leopold's land aesthetic. Through these experiences they have the "direct links with nature" that Oelschlaeger calls for and, as a result, they also have powerful feelings of connection with

⁴² See Rolston for a discussion, p. 397

⁴³ Rolston, p.400

nature. The fly-fishers show us not only that it is possible to achieve Leopold's land aesthetic, but they show us how.

IV. *The Aesthetics of Fly-fishing*

"Trout are designed to render, via the fly rod, the most aesthetically perfect experience available to mortal man."⁴⁴

Fly-fishers have a literary tradition that goes back to approximately 900 AD.⁴⁵ Over its history, fly-fishing has been variously used as a religious analogy, as the consummate hobby for the leisure class, and more recently as the preferred sport of intellectual fishers. However, throughout the shifting functions of fly-fishing, some factors have remained fairly consistent. No matter how it has been justified fly-fishing has always been recognized by its practitioners as a valuable experience. For non-fishers the source of this experience may not appear obvious, but a review of the literature presented in the context of Leopold's land aesthetic provides some powerful images of one culture's aesthetic experience of trout streams.

Literary Themes

After reviewing a selection of fly-fishing literature I chose to study four authors and six books: Sex, Death and Fly-Fishing⁴⁶ and Trout Bum: Fly-fishing as a Way of Life⁴⁷ by John Gierach, Fisherman's Spring⁴⁸ and A River Never Sleeps⁴⁹ by Roderick Haig-Brown, The River Why⁵⁰ by David James Duncan and A River Runs Through It⁵¹ by Norman Maclean. Many fly-fishing books focus on the craft of fly-fishing, describing its tools and techniques. These authors were chosen, however, because their writings are philosophical in nature. Through their writing they attempt to describe the source of

⁴⁴ Duncan, David James, The River Why, (Bantam Books, 1983), p. 33.

⁴⁵ Profumo, David and Graham Swift (eds.), p. 3, The Magic Wheel: An Anthology of Fishing in Literature, Picador, London, 1985.

⁴⁶ Gierach, John, Sex, Death and Fly-fishing, Simon and Schuster, New York, 1990.

⁴⁷ Gierach, John, Trout Bum, Simon and Schuster, New York, 1986.

⁴⁸ Haig-Brown, Roderick L., Fisherman's Spring, Winchester Press, New Jersey, 1975 ed.

⁴⁹ Haig-Brown, Roderick L., A River Never Sleeps, Winchester Press, New Jersey, 1974 ed..

⁵⁰ See previous notation 44 for reference.

⁵¹ Maclean, Norman, A River Runs Through It, University of Chicago, Chicago, 1976.

pleasure they derive from fly-fishing. Like Leopold, they all have intimate relationships with favorite landscapes and, like Leopold, they desire to understand and share these relationships.

The books were published between 1946 and 1990, with Haig-Brown's, A River Never Sleeps (1946) the earliest and Gierach's, Sex, Death and Fly-fishing(1990), the most recent. The authors are predominantly writers for whom fly-fishing is a consuming hobby. Their books present descriptions of their experiences and thoughts on fly-fishing. Gierach, the exception, is a fly-fisher who writes to support his fly-fishing; his books present a description of his life as a fly-fisher.⁵²

Despite the different perspectives and time periods of the authors, their descriptions of fly-fishing and its value are surprisingly similar. There are several consistent themes which run through each book. I have selected three of these themes which I feel best exemplify the aesthetic of fishing. The first theme, *Knowledge*, describes the quest for increasing knowledge and the significance of questions asked and answered. The second theme I have called *Seeing*. This theme explores the intuitive decision-making process used by the authors. The last theme, *Enlightenment*, relates the authors' expressions of revelation, enlightenment, and their experience of feeling one with the environment.

Knowledge

A river too may have its deep and secret places, may be so large that one can never know it properly; but most rivers that give sport to fly fishermen are comparatively small, and one feels that it is within the range of the mind to know them intimately -- intimately as to their changes through the seasons, as to the shifts and quirks of current, the sharp runs, the slow glides, the eddies and bars and crossing places, the very large rocks on the bottom. And in knowing a river intimately is a very large part of the joy of fly fishing.⁵³

"Working knowledge" of trout and stream is acknowledged by all the writers as essential to fly-fishing. The fisher's knowledge is gained by making new discoveries, by re-testing information season after season and by synthesizing new information through the

⁵² See the foreword in Gierach's Trout Bum for a discussion of the difference between a "trout bum" and an armchair angler.

⁵³ Haig-Brown (1974), p.344.

integration of new and existing information. A fly-fisher must understand, among other things, the links between the fish and its food, the relationship between stream shape and fish habitat and importance of stream geology to the nutrients that support fish food. The more a fly-fisher understands these relationships -- the interconnection and interaction of each component of the stream -- the more a successful day of fishing is also a pleasurable day of fishing.

Nothing that moves or lives or exists within range of his vision and understanding is unimportant to a fisherman. Birds, trees, mammals, insects, meadows, rock , and sky are all part of a fisherman's pleasure.⁵⁴

While fly-fishers over time and with diligence become very knowledgeable about trout and their habitat, the fishers suggest that it is never possible to understand everything. Learning is a never ending process for the fishers, a process that is in itself pleasurable. The authors often view the trout and river as posing questions that must be answered. Every question that is resolved presents a new piece of information, however big or small, that brings the fisher closer to understanding the whole. At the same time, however, each new piece of information also opens up a new range of questions to be answered. Haig-Brown said of the Campbell River; "I know more questions to ask myself about the river and its fishes than I could have dreamed of twenty or even ten years ago."⁵⁵ For the authors there can be no absolute understanding of the river and its inhabitants, but the flyfishers relish the process of moving towards such an understanding and having deeper insight with each step.

Knowledge however, is clearly more than another tool of the trade. The quest for knowledge is the accumulation of information, enough of which generates an intimate understanding of a particular stream. It is the layering of each piece of information in an attempt to comprehend the whole of the stream and its inhabitants. Each author mentions this quest for comprehensive understanding as a significant part of the pleasure in fly-fishing. The authors feel that knowledge and the development of skills that increase their knowledge, contribute to their quality of life. As said by Haig-Brown:

⁵⁴ *Ibid.*, p.120.

⁵⁵ *Ibid.*, p.205.

Birds, trees, mammals, insects, meadows, rock and sky are all part of a fisherman's pleasure the man will have a habit built into him, a way of noticing the world, that enriches his whole life.⁵⁶

This "way of noticing the world" with its resulting enrichment supports Leopold's belief that the quest for knowledge in a familiar landscape directly influences the human experience of that landscape.

Seeing

All there is to thinking is seeing something noticeable which makes you see something you weren't noticing which makes you see something that isn't even visible.⁵⁷

Each author wrote of his ability *to see* objects, patterns and movements that were not visible. The authors use of the words "to see" is a reflection our culture in which "seeing is believing." To see something is to know it exists. It is not surprising then, that the authors use the phrase "to see" when they are actually discussing something that has been perceived. Thus, when Maclean proposes his thoughts are triggered by seeing something "that isn't even visible" we can understand him to mean that he has perceived something not visible.

As Dewey explains, perception is not only gathering information through our senses, but also shaping that information with our existing knowledge.⁵⁸ When a non-fisher sees a fish, then he, or she, knows a fish is there. When a fisher perceives a fish then, he, or she, knows its is there even when it can not been seen. The fisher's receptivity to the environment enables him, or her, to respond to information that may not be available to others less receptive. John Gierach describes these responses as intuitive, writing that a fly fisher "relies largely on intuition and the ability to see things that aren't immediately evident....".⁵⁹

⁵⁶ *Ibid.*, p.120.

⁵⁷ Maclean, p.100.

⁵⁸ Dewey, p. 22.

⁵⁹ Gierach (1986), p.28

In The River Why, David James Duncan further describes intuitive knowledge as "native intelligence".

A native is a man or creature or plant indigenous to a limited geographical area - a space bounded and defined by mountains, rivers, or coastline ... with its own peculiar mixture of weeds, trees, bugs, birds, flowers, streams, hills, rocks and critters (including people), its own nuances of rain and seasonal change. Native intelligence develops through unspoken or soft-spoken relationship with these interwoven things: it evolves as the native involves himself in his region... A native awakes in the center of a little cosmos (and) senses the barely perceptible shiftings, migrations, moods and machinations of its creatures, its growing things, its earth and sky ... I don't think you get native intelligence just by wanting it. But maybe through long intimacy with an intelligent native, or with your native world...⁶⁰

In this passage Duncan clearly echoes Leopold's theory regarding the relationship between sensory perception, knowledge and sense of place. Duncan explains that native intelligence, or intuition, is derived from intimacy with a region. It is this intimacy which allows him to sense things that are "barely perceptible" --like migrations and machinations-- but that are still very important in his understanding of the region, his ability to catch fish, and his sense of fulfillment.

Similarly, Gierach suggests that "fish sense" comes from being able to make decisions, "to be able to see what is right there in front of you without having to sift through a lot of thoughts and theories."⁶¹ In this case, "seeing what was right there in front of him" meant attempting to set a hook into a fish that he could not see. Gierach's ability to know when to set the hook took many months of "looking", but finally he was able to sense " however subtle it might be, a certain quick, sure efficiency to the movements of feeding trout, even when muted by four feet of water ... It's something that stands apart from the more random motions of water on line and sun on water..."⁶²

"Native intelligence", "intuition" and "fish sense" are all terms used by the authors to explain a moment experienced, an action taken or a decision made without any conscious thought or any visible information. Interestingly, none of the author question or attempt to

⁶⁰ Duncan, p. 53.

⁶¹ Gierach (1986), p.25

⁶² Ibid. p. 29

identify the basis of their intuitive response. Clearly for them it is a special moment, even a mystical moment. Leopold, however, has explored the source of intuitive knowledge, believing intuitive knowledge, more so than rational understanding, to be an important component of the aesthetic experience.

I propose that Leopold would explain every intuitive reaction to landscape as the sub-conscious filtering of sensory perception through an existing cognitive framework. Just as we do not need to consciously make the link between seeing a fish and knowing it is there, a fly-fisher need not consciously link what he, or she, perceives with knowledge about fish. A fly-fisher's cognitive presuppositions are better informed and his, or her perceptual habits are more developed than a non-fisher. Thus, the fisher has a greater ability to aesthetically experience the stream environment.

Arnold Berleant, agrees. He proposes:

(t)he human world is not barren, nor is it meager. Its possibilities are, indeed, far richer than the world we usually apprehend.... We must enlarge our perceptual consciousness and expand our sensory acuteness.... Human perception blends memories, beliefs, and associations, and this range of meaning deepens experience.⁶³

Leopold and Berleant would suggest that the fly-fishers have enlarged their perceptual consciousness and expanded their sensory acuteness and their reward is a rich and wonderful experience.

Enlightenment

Given the mystical manner in which the authors view their intuitive environmental responses, it is not surprising then that these responses often lead to experiences of "revelation" and "enlightenment." The authors express that these experiences are extensions of their intuitive responses, which result in the feeling that "understanding is right around the corner." They write that for brief moments they understand "the whole." As Haig-Brown describes it, he becomes "a pair of disembodied eyes seeing the absolute truth."⁶⁴

⁶³ Berleant, p. 23.

⁶⁴ Haig-Brown (1975), p. 135.

Here again the language each author uses to describe his experience reflects their cultural biases. Haig-Brown speaks of feeling detached and disembodied at the moment of truth. In his mind these experiences of revelation necessitate the removal or loss of his body, as if his body stands in the way of revelation. Our physical separation from our surroundings is so completely embedded in our culture that we imagine we must disembody ourselves in order to become one with our surroundings -- to know the "absolute truth." Under the modern paradigm, where truth is the domain of the rational mind, it is understandable for the fishers to feel as if the body is non-existent for this moment of truth. However, we know from the writings of the authors that it is the very receptivity of the body's senses that makes this moment of revelation possible.

In this case, the fly-fisher, through his intimate involvement with the stream, experiences something for which our modern culture has no language. Therefore, the fisher is not only limited in his explanation, but also his understanding of the experience. This is the barrier of language that Oelschlaeger warns us about -- where the modern culture has come between the fisher's experience and understanding of nature. Understanding this we can see another possible explanation for the fly-fisher's experience.

According to our current cultural beliefs, I suggest that our bodies have been relegated to the sole purpose of transporting our minds. In the past we have depended upon the physical abilities of our bodies to make possible our separation and independence from nature. Increasingly, however, we depend on our mental abilities, and our bodies become just painful reminders of our link to the natural world. We have been neglectful of our bodies and have ignored their abilities in our effort to perfect our intellects. As a result we are unaware of the existing role our bodies play in our experiences and we limit our experiences by not training our bodies as we have trained our minds.

Understandably, the fishers have not appreciated the role of their bodies as collectors, conduits, and shapers of information passing from their surroundings to their minds. Thus, as is culturally dictated, they feel detached from their bodies at moments of revelation, when in fact their bodies have never been more grounded in place and integrated with environment. The wholeness they experience is not just of an environment they look in upon, but the wholeness is the experience of their bodies and bodies linked to each other and to their surroundings. Leopold has recognized the role of the physical body as central

to these moments of revelation, and further, he has suggested that by developing our senses along with our knowledge of a landscape we may begin to increase our own moments of revelation.

Clearly the fly fishers' experiences with the stream environment are powerful and inspiring. Through their finely-tuned senses and their ever-growing understanding of trout, they experience very gratifying moments of pleasure. Though only Duncan specifically describes fly-fishing as an aesthetic experience, we can find in the literature all of the components that Leopold defined as the land aesthetic. Fly-fishers relish their increasing knowledge of trout stream ecology and they clearly must open all of their senses to be receptive to the surrounding environment. The results are moments of revelation described in a way similar to Leopold's own description of experiencing nature's harmony. Fly fishers, in their ability to understand what may be hidden below the surface of a small creek, are able to aesthetically appreciate a creek that others may pass by because of its relatively low scenic appeal. They also recognize that comparatively their lives are enriched by their experience of the environment, and this is the joy of fly fishing.

V. Conclusions: The Landscape Architect and a New Landscape Aesthetic

In developing a new landscape aesthetic, we must recognize that what is so powerful about fly-fishing literature is not the individual experiences of the fishers, but the collective experiences which form their culture. A paradigm shift from modernism will necessarily require that as a culture we come to new understands about our relationship to nature, and as landscape architects we will have a role in that new understanding. Given our knowledge of both socio-cultural and natural processes we are in an excellent position to contribute to a theoretical framework which defines the interconnections between nature and the human species.

We are also in a position, as a profession, to benefit greatly from such a paradigm shift. In order to benefit, however, we must adopt new practices. First, we must ensure that our students have a broad understanding of the philosophies which both support and challenge

our cultural framework. We are members of our culture, and as such, work within its truths. We should fully understand our culture and its support systems so that our work can enhance the culture's strengths and confront its weaknesses.

Second, from Leopold, we understand that book learning is not the best way to learn about the landscape. Students will need extensive experience in the field -- they will have to have the opportunity to explore the reality of what they learn in the classroom. Time spent experiencing the landscape will facilitate the process of turning information into knowledge -- of turning facts into "native intelligence."

Third, to further develop native intelligence students and professionals must be encouraged to stay in one landscape and design in that landscape. A general understanding of natural processes could be gained during a student's university education, however to understand a particular landscape with its natural and cultural processes requires more time. Today landscape architects move across the country and the world designing in different landscapes from one month to the next. Even with an increasing recognition of the importance of place, we still spend limited time with each landscape, largely due to the fast pace of project design and the economy of landscape design. These pressures will not accommodate Aldo Leopold's landscape aesthetic. Designing for a place based on intimate experience of that place will require an extended stay, but the stay will have many beneficial consequences.

One benefit could be an enhanced design process which allows us to incorporate our knowledge of the landscape's natural processes. Robert Thayer, in his article *Visual Ecology: Revitalizing the Aesthetics of Landscape Architecture*, has suggested that landscape architects have spent much energy since McHarg's Design with Nature, trying to perfect our analysis of site and region so that we may design with ecological surety. Thayer suggests, however, that for all the information we gain through analysis, we have not successfully incorporated such information into our designs. He writes;

(Many) a landscape architecture student has undertaken an exhaustive and methodological landscape analysis only to ignore it.... There has been no impetus, no theory to enable the student to progress logically from ecological analysis to spatially aesthetic design. The theoretical bridge between them is missing....Part of the answer lies in stimulating the landscape architect to develop new, *intuitive* approaches to developing more environmentally appropriate landscape imagery.⁶⁵

According to Thayer, we have taken data from our analyses and attempted to plug this raw material directly into the design without integrating it into the design process. In order to achieve an integration of fact and process, Thayer proposes an intuitive approach. To a modernist Thayer's use of the term intuitive probably sounds vague and highly irrational. However, given our new theory of landscape aesthetics we can build on Thayer's suggestion.

Designing with intuition, as with fishing, requires that we become so accomplished with information learned in school and in the field, that information is incorporated into our subconscious and becomes our knowledge to the landscape. As part of our subconscious this information becomes available as we filter our sensory input. This information becomes a source of intuition -- or the native intelligence described by Duncan. Intuition, then becomes the foundation for creative action. For the fly fisher, the body is able to respond to cues apparently invisible. For the designer, ecological information becomes the "raw material" for an intuitive design process and not just the raw material of the design itself. Students and professionals must have their own "native intelligence" if they are to translate ecological information into meaningful design.

Another benefit is that landscape architects will be able to further develop recent theories which have been limited by the modern paradigm. Already we have discussed how a new landscape aesthetic can help us shape ecological knowledge into meaningful design. This new theory would support those encouraging new theories of ecological design. Theories proposing the use of symbolism and rituals in design have also recently emerged as potential tools for enriching the human experience of landscape.

⁶⁵ Thayer Jr., R. L., "Visual Ecology: Revitalizing the Aesthetics of Landscape Architecture.", (Landscape 20:2, 1976), p.39.

James Corner suggests that symbolism offers the means to reconstitute our lives' meaning.⁶⁶ Deep, meaningful symbolism, however, requires deep knowledge and the language to express that knowledge. The culture of the fly fishers', with its knowledge based firmly in their surroundings, is rich with potential symbolism. For instance, When a fisher sees a symbol of a stone fly, that symbol embodies all that the fisher knows of stone flies, streams and fish. A non-fisher would just see a bug and would perhaps only be reminded to pick up some bug repellent on the way home.

As a whole, our culture does not have an intimate knowledge of nature, and therefore, our symbolism is devoid of historic, ecological, and experiential meaning. Without the experiential knowledge of the landscape we have limited our potential for a meaningful experience. However, as the paradigm shifts and we begin to explore our relationship with nature our symbolic representations of nature will increase. As landscape architects we will have the opportunity to use more symbolism in our designs thereby, deepening the meaning of our designs and encouraging further contact with nature.

As the development of a new symbolic language occurs simultaneously with a new perspective on our relationship to nature, we will also have the materials to create rituals, and perhaps more importantly, we will have reasons for ritual celebrations. The new feelings of oneness, our deeper understanding of the miracle of ecological complexity, our new experience of beauty -- these are all potential foundations for new rituals. As celebrations of our new interconnectedness to nature, these rituals would also provide the landscape architect an avenue to enhance our culture's aesthetic experience of the landscape.

Landscape architecture as practiced, could undergo significant changes and landscape architects, as designers, could contribute significantly to the promotion of a new landscape aesthetic. As designers, we have recognized the limitations of existing aesthetic theories and we understand, better than most, the aesthetic potential of the landscape. We must recognize that developing a new aesthetic would require a change in our existing paradigm. We should encourage that change in our writings and through education, and when the

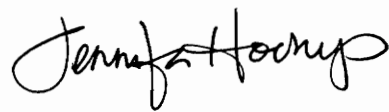
⁶⁶ Corner, James, "A Discourse on Theory I: 'Sounding the Depths' --- Origins, Theory, and Representation." (*Landscape Journal*, Fall 1990), p. 77.

change begins we must practice and design in ways that promote the new paradigm and its renewed appreciation of nature.

This is our ethical responsibility to the human species and the environment, but it is a responsibility with extraordinary rewards. To broaden the scope of aesthetic experiences is to tap previously inaccessible resources. To develop our own ability to perceive the environment through increased sensory reception and increased environmental understanding improves our creative potential, and offers a completely new range of design interpretation. The richness of experience that Leopold and the fly fishers describe does not need to be rare in the daily experience of the landscape. As landscape architects, through the promotion of new cultural concepts and through the development of our own creative potential, we have the opportunity to enrich the lives of many by defining and practicing a new paradigm of landscape aesthetics.

Vitae

Jennifer L. Hoerup was born on October 7, 1964. She graduated from Goshen Central High School, Goshen, New York in June of 1982. She attended Cornell University and received a Bachelor of Science degree in Plant Science in June 1986. In 1991 she returned to school to attend Virginia Polytechnic Institute and State University and received a Master's degree in Landscape Architecture in May of 1995. She plans to practice environmental planning and design of large-scale landscapes, and pursue her interest in environmental ethics.

A handwritten signature in black ink that reads "Jennifer Hoerup". The signature is written in a cursive style with a large initial 'J' and a long, sweeping underline.